

## CLAIMS

What is claimed is:

1. A method for identifying a compound affecting the MAPK pathway comprising the steps of:
  - 5 a) providing a cell stably transfected with a recombinant construct, said recombinant construct comprising a polynucleotide encoding a reporter gene, wherein said reporter gene operatively linked to the *c-fos* promoter;
  - b) contacting said cell with a compound; and
  - c) detecting a change in expression of said reporter gene;
- 10 whereby a compound affecting the MAPK pathway is identified by detecting the change in expression of said reporter gene under control of the *c-fos* promoter.
2. A method of claim 1, wherein said reporter gene is the luciferase gene.
3. A method of claim 1 or 2, wherein said compound inhibits the MAPK pathway.
4. A method of claim 1 or 2, wherein said compound activates the MAPK pathway.
- 15 5. A method of claim 3, wherein said cell constitutively expresses low levels of invasion-associated genes, whereby stimulation of said invasion-associated genes occurs via activation of the MAPK pathway.
6. A method of claim 4, wherein said cell constitutively expresses low levels of invasion-associated genes, whereby stimulation of said invasion-associated genes
- 20 occurs via activation of the MAPK pathway.
7. A method of claim 3, wherein said cell is weakly tumorigenic, whereby *c-ets-1* mRNA expression is activated exclusively via the MAPK pathway in said cell.
8. A method of claim 4, wherein said cell is weakly tumorigenic, whereby *c-ets-1* mRNA expression is activated exclusively via the MAPK pathway in said cell.
- 25 9. A method of claim 3, wherein said cell is a SNB-19 glioma cell.



21. A cell of claim 16 or 17, wherein said cell is weakly tumorigenic, whereby c-ets-1 mRNA expression is activated exclusively via the MAPK pathway in said cell.
22. A cell of claim 16 or 17, wherein said cell is a SNB-19 glioma cell.
23. A cell of claim 16 or 17, wherein the time course of a change of expression of said reporter gene corresponds to the time course of a change in *c-fos* expression.
24. A cell of claim 16 or 17, wherein said recombinant construct further comprises at least a portion of the *c-fos* 3'-untranslated region sequence downstream of said reporter gene sufficient to cause reporter gene expression to correspond to the expression of *c-fos*.

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